

WHAT IS CLAIMED IS

1 1. A method for setting routers for making a setting
2 of control information to a plurality of routers mounted on a
3 network to which a plurality of terminals is connected and adapted
4 to control, by being disposed among terminals, communication
5 among terminals comprising:

6 a step of adding contents requesting for replication of
7 a payload to a packet transmitted from a terminal of a transmitter
8 and of performing replication of said payload using said router
9 in accordance with said request;

10 a step of making a setting of said control information in
11 accordance with replicated payload; and

12 a step of transmitting said packet to a next router or a
13 terminal.

1 2. The method for setting routers according to Claim
2 1, wherein said packet is an IPv6 (Internet Protocol Version 6)
3 packet and wherein contents requesting for replication of said
4 payload are contained in an expanded header of said IPv6 packet.

1 3. The method for setting routers according to Claim
2 2, wherein processing of said IPv6 packet in said router includes;

3 a step of judging whether a Hop-By-Hop option exists in
4 said expanded header;

5 a step of judging, when said Hop-By-Hop option exists, a
6 type of said Hop-By-Hop option; and

7 a step of performing, when said Hop-By-Hop option is a
8 predetermined-option type, replication of said payload.

1 4. The method for setting routers according to Claim
2 2, wherein said IPv6 packet in said router includes:

3 a step of judging whether a destination address contained
4 in an IPv6 header format is an address of said router or of an
5 other router,

6 a step of judging, when said destination address is said
7 address of said router, whether a destination option header
8 contained in said expanded header exists;

9 a step of judging, when said destination option header
10 exists, a type of said destination option header; and

11 a step of performing, when said option is a
12 predetermined-option type, replication of said payload.

1 5. A router setting apparatus for making a setting of
2 control information to a plurality of routers mounted on a network
3 to which a plurality of terminals is connected and adapted to
4 control, by being disposed among terminals, communication among
5 terminals comprising:

6 a payload retrieving section used to retrieve a payload
7 required for being replicated from packets input from an input
8 interface section of a router;

9 a payload replicating section used to replicate said
10 payload when said payload requiring for being replicated is
11 judged by said payload retrieving section to exist; and

12 a control information setting section used to set
13 predetermined control information to said router in accordance
14 with said payload replicated by said payload replicating section.

1 6. The router setting apparatus according to Claim 5,
2 wherein said packet is an IPv6 packet and wherein said payload

3 retrieving section checks existence of a replication request
4 based on an expanded header of said IPv6 packet.

1 7. A router setting apparatus for making a setting of
2 control information to a plurality of routers mounted on a network
3 to which a plurality of terminals is connected and adapted to
4 control, by being disposed among terminals, communication among
5 terminals comprising:

6 a payload retrieving means used to retrieve a payload
7 required for being replicated from packets input from an input
8 interface means of a router;

9 a payload replicating means used to replicate said payload
10 when said payload requiring for being replicated is judged by
11 said payload retrieving means to exist; and

12 a control information setting means used to set
13 predetermined control information to said router in accordance
14 with said payload replicated by said payload replicating means.

1 8. The router setting apparatus according to Claim 7,
2 wherein said packet is an IPv6 packet and wherein said payload
3 retrieving means checks existence of a replication request based
4 on an expanded header of said IPv6 packet.